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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/068,152	02/06/2002	Sang-Eun Lee	8750-17	7500

7590 02/27/2004

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EXAMINER

HOLLINGTON, JERMELE M

ART UNIT	PAPER NUMBER
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2829

DATE MAILED: 02/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action

Application No.

10/068,152

Applicant(s)

LEE ET AL.

Examiner

Jermele M. Hollington

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--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 30 December 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ they raise the issue of new matter (see Note below);
- (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____

3. ☒ Applicant's reply has overcome the following rejection(s): the rejection of claim 17.
4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: see attachment.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____

Claim(s) objected to: 17.Claim(s) rejected: 1-16 and 18-20.

Claim(s) withdrawn from consideration: _____

8. ☐ The drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
10. ☐ Other: _____

Jermele Hollington

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed Dec. 30, 2003 have been fully considered but they are not persuasive.

1) Regarding claim 7, the applicants argue: “*Regarding claim 7, Simmons merely discloses markings showing the location of defects. Simmons does not disclose a marking configured to identify a type of defect. As taught in Simmons at column 3, lines 54-57, a defect file is generated that identifies a defect by its size. However, Simmons teaches at column 3, lines 58-60, that the wafer map 10 of Fig. 1 only indicates the location of defects 14.*”

In review of the above argument, the examiner disagrees with applicants. First, the claimed language says “*a plurality of markings, each marking corresponds to a wafer defect, wherein locations of the markings on the wafer map correspond to locations of the defects on the wafer, and wherein each marking is configured to identify a type of defect.*” Base on the claimed language, the examiner has concluded that the markings are the wafer defects. In viewing Simmons, col. 3, lines 52-54, states: “...a wafer inspection tool such as those known in the art inspects a wafer 12.” Wherein, “Inspection tools identify each identifiable wafer defect 14 by location and size.” [See col. 3, lines 44-45] In order for Simmons to determine what type of defects located on the wafer, he created bins [see col. 4, lines 19-32] to place the defects into different sizes to identify as a small defect “Bin 1: 0.0 to 0.5 square μm ” [see col. 4, line 27] or a large defect “Bin 6: >8.0 square μm ” [see col. 4, line 32]. Therefore with the statement above, the examiner believes Simmons still read on the claimed invention.

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2) Regarding claims 11, 15-16, and 19, the applicants argue: “ Examiner cites column 4, lines 3-65 and Figs. 3-4 of Simmons as disclosing the determining a composition of the wafer defects...In the present invention the results of determining a composition of a defect are described in the specification...the composition of the defect refers to the chemical composition of the defect...”

In reviewing the above arguments, first the examiner will like to remind the applicants that regarding the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., chemical composition) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Second, Simmons determined the composition of the wafer defects by its weight value. In col. 4, lines 35-40, it states “...each defect 14 defecting by the surface inspection tool is then assigned a defect weight value WV which reflects its projected effect on a wafer yield. The defect weight value WV is based on defect size and part type specific geometry parameters, as known from historical records and /or projected therefrom.”

3) Regarding claims 1 and 13, the applicants argue: “*Regarding claim 1, the Examiner correctly explains that Simmons fails to disclose using different types of marks to identify different types of defects. However, Simmons also fails to disclose, “analyzing the defect composition.”*”

In reviewing the above arguments, first the examiner will like to remind the applicants that regarding the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., chemical

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composition) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Second, Simmons determined the composition of the wafer defects by its weight value. In col. 4, lines 35-40, it states "...each defect 14 defecting by the surface inspection tool is then assigned a defect weight value WV which reflects its projected effect on a wafer yield. The defect weight value WV is based on defect size and part type specific geometry parameters, as known from historical records and /or projected therefrom."

Further the applicants argue: "The Examiner also cites *In re Seid*... The examiner has failed to cite an evidence as to why it would have been obvious to use different types of marks to identify different types of defects..."

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). Further, the examiner must apply the law consistently to each application after considering all the relevant facts. If the facts in a prior legal decision are sufficiently similar to those in an application under examination, the examiner may use the rationale used by the court. If the applicant has demonstrated the criticality of a specific limitation, it would not be appropriate to rely solely on case law as the rationale to support an obviousness rejection.

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“The value of the exceedingly large body of precedent wherein our predecessor courts and this court have applied the law of obviousness to particular facts, is that there has been built a wide spectrum of illustrations and accompanying reasoning, that have been melded into a fairly consistent application of law to a great variety of facts.” *In re Eli Lilly & Co.*, 902 F.2d 943, 14 USPQ2d 1741 (Fed. Cir. 1990).

Base on the arguments above, the examiner believes that Simmons still read on the claimed invention.

2. Claim 17 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

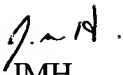
3. The following is a statement of reasons for the indication of allowable subject matter: regarding claim 17, the prior art does not disclose a bar graph as claimed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jermele M. Hollington whose telephone number is (571) 272-1960. The examiner can normally be reached on M-F (9:00-4:30 EST) First Friday Off.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamand Cuneo can be reached on (517) 272-1957. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


JMH
February 10, 2004

Jermele M. Hollington
Examiner
Art Unit 2829


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SUPERVISORY PATENT EXAMINER
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